

REMARKS

This reply is fully responsive to the Office action dated 23 NOV 2010, and is filed within six - (6) months following the mailing date of the Office action. The

- 5 Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136(a) requesting an extension of time of the number of months necessary to make this response timely filed. The methods of payment and fees for petition fee due in connection therewith are enclosed.

10 **Disclosure/Claims Status Summary:**

Claims 1 to 38 are pending in the application.

- Claims 3, 17, and 30 to 38 have been canceled without prejudice to applicant's rights or creation of an estoppel in preventing Applicant from arguing allowability of the
15 canceled claim in the future, including in further off-spring applications.

Information Disclosure Statement (IDS) compliance requirement.

- The amendment filed 29 Aug 2003 is objected to under 35 U.S.C. 132.
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Claims 1 and 2 are objected to because of informalities.

Claims 30-38 are objected to under 37 CFR 1.75(c).

- 25 Claims 1, 2, 7, 8, 19, 21, 22, and 23 are rejected under 35 U.S.C. §112, first paragraph.

- Claims 1, 4, 8-10, 16, 18, 22-26, and 30-38 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly
30 claim the subject matter which applicant regards as the invention.

Claims 1, 2, 4, 6, 7, 16-18, 20, and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,809,199 to Tran.

5 Claims 1, 2, 4-10, 16, 18-24, and 30-38 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,755,998 to Yamazaki et al.

Claims 1, 2, 4-6, 8, 9, 16, 18-20, 22-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 4,386,163 to Kodama.

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Claims 1, 2, 4-6, 8-10, 12, 16, 18-20, 22-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over International Patent Publication WO 99/13541 A1 to Prassas.

STATEMENT OF THE SUBSTANCE OF THE EXAMINER INTERVIEW
37 CFR §1.133(b)

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Applicant sincerely thanks the Examiner for the telephonic interview on 23 DEC 2010, and notes, with great appreciation, the Examiner's comments regarding the claims, the specification, and the abstract of the present invention.

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Claims discussed:

All claims were discussed.

Identification of specific related references:

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Not applicable.

Identification of the principle proposed amendments:

Amended the claims and the specification to clarify the subject matter of the present invention in accordance with the discussions during the Examiner Interview.

IDS Compliance Requirements:

Information Disclosure Statement (IDS) compliance requirement.

- Applicant thanks the Office for consideration of the information disclosure statement, and the notes by the Office as to the reasons for non-compliance. Applicant respectfully re-submits IDS NPL #19 and #20 for consideration.

Objections under 35 U.S.C. 132:

The amendment filed 29 Aug 2003 is objected to under 35 U.S.C. 132.

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- Applicant very respectfully continues the assertion that amendment filed on 29 AUG 2003 to the table II of the specification simply corrects obvious clerical errors, and does **not** add any new subject matter. As clearly acknowledged by the Office on page 3 of the Office action of 23 Nov 2010, the typographical errors corrected by the amendments "... are within the scope of the ranges defined by the original specification..." Accordingly, the modification should not be considered as new subject matter.

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The Office further states on page 3 of the Office action that:

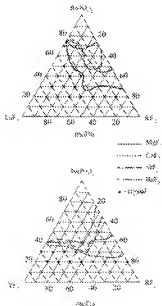
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"While the changes to the table are within the scope of the ranges defined by the original specification, it is unclear how one of ordinary skill in the art would have known that unidentified 2% from the first eight samples should have been added to the $\text{BaF}_2 + \text{RF}_x$ component rather than $\text{Ba}(\text{PO}_3)_2$, $\text{Al}(\text{PO}_3)_3$, or an unspecified component."

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The following is respectfully submitted to clarify how one of ordinary skill in the art would have known that the alleged "unidentified" 2 mol % from the first eight examples should have been added to the $\text{BaF}_2 + \text{RF}_x$ component, and **not** $\text{Ba}(\text{PO}_3)_2$, $\text{Al}(\text{PO}_3)_3$, or an unspecified component. It is exceptionally well-known that increasing

the mol % of the fluoride component of a fluorophosphates based glass system improves and enhances its overall performance and characteristics. For example, Applicant respectfully submits the publication “World Scientific, 1999, titled “Ligands and Modifiers in Vitreous Materials: Spectroscopy of condensed Systems,” the entire disclosure of which is incorporated by reference herein and submitted as IDS, as a clear example that one of ordinary skill in the art would have known to increase the fluoride component from the first eight examples and **not** $\text{Ba}(\text{PO}_3)_2$ and $\text{Al}(\text{PO}_3)_3$. For example, as illustrated on page 3 of the World Scientific publication (and shown below), increasing the fluoride component of a glass system **increases** the glass-forming domain, resulting in an increase in boundaries of glass formations. Increasing boundaries of glass formations allows for greater selection of different types of glass systems, with each glass system having various different types of overall characteristics from which to select. Therefore, clearly, one of ordinary skill in the art would have known that the 2% from the first eight samples should be added to the $\text{BaF}_2 + \text{RF}_x$ component rather than $\text{Ba}(\text{PO}_3)_2$, $\text{Al}(\text{PO}_3)_3$, if for nothing else, just to increase the glass forming domain.



As correctly cited by the Office on page 3 of the Office action, the MPEP 2136.07 states:

“An amendment to correct an obvious error does not constitute new matter where one skilled in the art would not only recognize the existence of the error in the specification, but also the appropriate correction.”

Applicant has corrected an obvious clerical error. Applicant recognized the existence of the error in the table II (as compared to the rest of the specification, which is correctly acknowledged by the Office that supports such a correction) and, based on the above evidence (World Scientific publication, 1999), Applicant made the appropriate (and most obvious) correction, which is recognized by one skilled in the art.

Additional, based on the disclosure of the present invention alone one of ordinary skill in the art would have known to increase the fluoride ($\text{BaF}_2 + \text{RF}_x$) content in the fluorophosphates glass system of the present invention, which will also improve the optical characteristics of the glass and, in particular, improve the transparency within the ultraviolet, visual, and near infrared optics portion of the optical spectra, allowing the glass system of the present invention to be used for laser applications, amplifiers, and high density optical storage. Support for this statement is provided within the SUMMARY OF THE INVENTION, paragraph [0010]. Hence, it is respectfully submitted that the amendment to the Table II does **not** constitute new subject matter under 35 U.S.C. 132, and Applicant respectfully requests the withdrawal of the objection to the amendment filed 29 Aug 2003 under 35 U.S.C. 132.

Objections to Claims:

Claims 1 and 2 are objected to because of informalities.

Applicant has corrected the minor formatting errors in claims 1 and 2 in accordance with the Office action requirements.

Therefore, Applicant respectfully requests that the Office withdraw the objections to claims 1 and 2.

5 **Objections of Claims under 37 CFR 1.75(c):**

Claims 30-38 are objected to under 37 CFR 1.75(c).

Claims 30 to 38 have been canceled without prejudice to applicant's rights or creation of an estoppel in preventing Applicant from arguing allowability of the canceled
10 claim in the future, including in further off-spring applications.

Therefore, Applicant respectfully submits that the objections under 37 CFR 1.75(c) are moot.

15 **Rejection of Claims under 35 U.S.C. §112, first paragraph:**

Claims 1, 2, 8, 19, 22, and 23 are rejected under 35 U.S.C. §112, first paragraph.

Applicant has amended paragraph [0013] and Table I, Rage I of the specification in full compliance with the Office requirements.

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Therefore, Applicant respectfully requests that the Office withdraw the rejection of claims 1, 2, 8, 19, 22, and 23 under 35 U.S.C. §112, first paragraph.

Claims 7 and 21 are rejected under 35 U.S.C. §112, first paragraph.

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The Office stated that the claims 7 and 21 recites "that the dopant is 'fluorides of the rare earth elements,' however, no where in the specification does it recite that the rare earth dopant could be a fluoride, only an oxide of the rare earth elements."

Applicant respectfully submits that the original abstract of the disclosure of the present invention has support for the claimed subject matter. The abstract has been further amended as a result of the Examiner Interview to clarify other issues.

5 Accordingly, fluorides of rare earth elements are fully disclosed in the originally filed patent application.

Therefore, Applicant respectfully requests that the Office withdraw the rejection of claims 7 and 21 under 35 U.S.C. §112, first paragraph.

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Rejection of Claims under 35 U.S.C. §112, second paragraph:

Claims 1, 4, 8-10, 16, 18, 22-26, and 30-38 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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For the record, the claimed limitation “BaF₂ + RFx” in claims 1, 8, 9, 10, 16, 22, 23, 24, 25, and 26 mean that both the “BaF₂” **AND** the “RFx” are required components, as fully supported in the disclosure. Accordingly, the notation “+” should be read as “AND.”

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Regarding claims 1, and 8-10, applicant has corrected the spacing between “BaF₂ + RFx” in claims 8-10. The spacing (or lack thereof in claims 8-10) was merely a typographical error.

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Regarding claims 1, 4, 8-10, and 22-26, Applicant has amended the claims by deleting the word “comprising” and replacing it with “consisting.”

Regarding claim 30 to 38, Applicants have canceled them without prejudice to applicant’s rights or creation of an estoppel in preventing Applicant from arguing

allowability of the canceled claim in the future, including in further off-spring applications.

Therefore, Applicant respectfully requests that the Office withdraw the rejection of the claims under 35 U.S.C. §112, second paragraph.

Rejection of Claims under 35 U.S.C. §103:

Claims 1, 2, 4, 6, 7, 16-18, 20, and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,809,199 to Tran.

Applicants respectfully traverse the rejection, the interpretation, and the modification of the Tran in view of the newly amended claims.

The claims have been amended to recite:

"A fluorophosphate glass ... consisting of:"

The newly amended claims use the transitional phrase "consisting of," which excludes any element, step, or ingredient not specified in the claim. Accordingly, Tran is no longer Applicable.

With respect to the claimed rare earth dopant, it is not clear if Tran is disclosing rare earth elements or rare elements, as has been disclosed in column 3, line 55+, which states "Ln = Lanthanide (La, Y, Sc,...)." The Yttrium "Y" and Scandium "Sc" are not rare earth elements, but are merely rare elements. The only rare earth element is the Lanthanum La, which is not used, disclosed, nor claimed by the present invention. Hence, even conversation of the rare earth element Lanthanum La of Tran to weight% would not meet the claimed limitations.

Accordingly, Applicant respectfully requests the withdrawal of the rejection of claims under 35 USC 103(a) because the Tran reference does not render as obvious the claimed limitations for the aforementioned reasons. Hence, Applicant respectfully submits that claims are allowable over the cited reference and solicits reconsideration and allowance of the claims.

Claims 1, 2, 4-10, 16, 18-24, and 30-38 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,755,998 to Yamazaki et al.

The claims have been amended to recite:
"A fluorophosphate glass ... consisting of:"

The newly amended claims use the transitional phrase "consisting of," which excludes any element, step, or ingredient not specified in the claim. Accordingly, Yamazaki is no longer Applicable.

Accordingly, Applicant respectfully requests the withdrawal of the rejection of claims under 35 USC 103(a) because the Yamazaki reference does not render as obvious the claimed limitations for the aforementioned reasons. Hence, Applicant respectfully submits that claims are allowable over the cited reference and solicits reconsideration and allowance of the claims.

Claims 1, 2, 4-6, 8, 9, 16, 18-20, 22-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 4,386,163 to Kodama.

The claims have been amended to recite:
"A fluorophosphate glass ... consisting of:"

The newly amended claims use the transitional phrase "consisting of," which excludes any element, step, or ingredient not specified in the claim. Accordingly, Kodama is no longer Applicable.

5 Accordingly, Applicant respectfully requests the withdrawal of the rejection of claims under 35 USC 103(a) because the Kodama reference does not render as obvious the claimed limitations for the aforementioned reasons. Hence, Applicant respectfully submits that claims are allowable over the cited reference and solicits reconsideration and allowance of the claims.

10 Claims 1, 2, 4-6, 8-10, 12, 16, 18-20, 22-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over International Patent Publication WO 99/13541 A1 to Prassas.

The claims have been amended to recite:

15 *"A fluorophosphate glass ... consisting of:"*

The newly amended claims use the transitional phrase "consisting of," which excludes any element, step, or ingredient not specified in the claim. Accordingly, Prassas is no longer Applicable.

20 Accordingly, Applicant respectfully requests the withdrawal of the rejection of claims under 35 USC 103(a) because the Prassas reference does not render as obvious the claimed limitations for the aforementioned reasons. Hence, Applicant respectfully submits that claims are allowable over the cited reference and solicits reconsideration and allowance of the claims.

Related References Made of Record and Not Relied upon:

Applicant has fully reviewed the related references made of record and not relied upon, and believes that the related references neither anticipates nor renders as obvious any of the Applicant's claims.

CONCLUSION

The Applicant respectfully submits that in light of the above amendment/remarks, all claims are now in allowable condition. The Applicant thus respectfully requests timely allowance of all of the pending claims.

Any claim amendments that are not specifically discussed in the above remarks are not made for patentability purposes, and it is believed that the claims would satisfy the statutory requirements for patentability without the entry of such amendments. Rather, these amendments have only been made to increase claim readability, to improve grammar, and to reduce the time and effort required of those on the art to clearly understand the scope of the claim language. Furthermore, any new claims presented above are of course intended to avoid the prior art, but are not intended as replacements or substitutes of any cancelled claims. They are simply additional specific statements of inventive concepts described in the application as originally filed.

Further, it should be noted that amendment(s) to any claim is intended to comply with the requirements of the Office Action so to elicit an early allowance, and is not intended to prejudice Applicant's rights or in any way to create an estoppel preventing Applicant from arguing allowability of the originally filed claim in further off-spring applications. Amendments may include cancellations of claims and/or the addition of new claims.

In the event the Examiner wishes to discuss any aspect of this response, or believes that a conversation with either Applicant or Applicant's representative would be beneficial the Examiner is encouraged to contact the undersigned at the telephone number indicated below.

The Commissioner is authorized to charge any additional fees that may be required or credit overpayment to the attached credit card form (if attached). In

particular, if this response is not timely filed, the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136(a) requesting an extension of time of the number of months necessary to make this response timely filed.

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Respectfully submitted,

10 24 January 2011

/Peter Ganjian/

Date

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